

REVIEW RIGHT TRIANGLES
GEOMETRIC MEAN, PYTHAGOREAN THEOREM, AND SPECIAL RIGHT TRIANGLES

SIMPLIFY THE EXPRESSION.

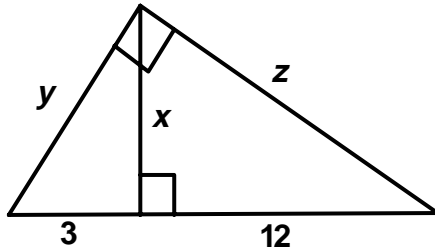
- 1) $\sqrt{54}$ _____ 2) $\sqrt{45}$ _____ 3) $\sqrt{845}$ _____ 4) $\sqrt{\frac{27}{2}}$ _____

FIND THE GEOMETRIC MEAN BETWEEN EACH PAIR OF NUMBERS. SIMPLIFY EACH ANSWER.

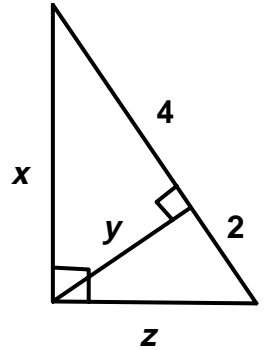
- 5) 4 and 8 _____ 6) 12 and 3 _____ 7) 5 and 125 _____

FIND THE VALUES OF x , y , and z . EXPRESS EACH ANSWER IN SIMPLEST FORM.

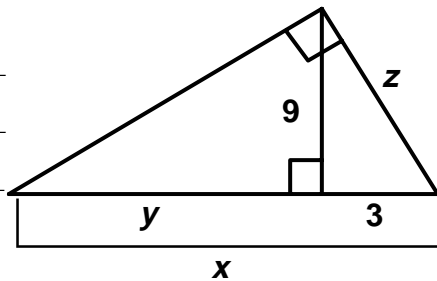
- 8) $x =$ _____
 $y =$ _____
 $z =$ _____



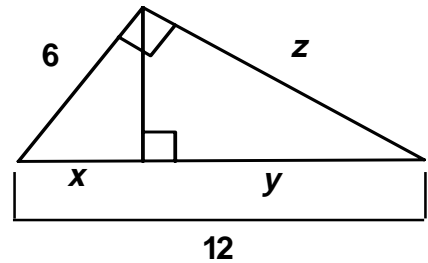
- 9) $x =$ _____
 $y =$ _____
 $z =$ _____



- 10) $x =$ _____
 $y =$ _____
 $z =$ _____



- 11) $x =$ _____
 $y =$ _____
 $z =$ _____

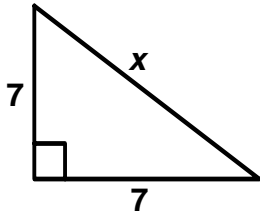


DETERMINE WHETHER THE GIVEN LENGTHS OF THE SIDES OF A TRIANGLE ARE THE SIDES OF A RIGHT TRIANGLE, ACUTE TRIANGLE, OR AN OBTUSE TRIANGLE.

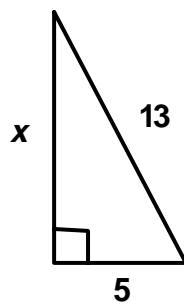
- 12) 6, 8, 10 _____ 13) 5, 7, 6 _____ 14) $5, 5\sqrt{3}, 10$ _____

FIND A VALUE FOR x . SIMPLIFY YOUR ANSWER. SHOW YOUR WORK!!

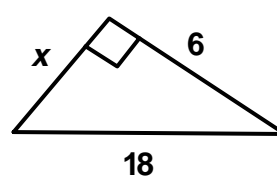
15) $x =$ _____



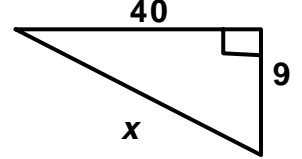
16) $x =$ _____



17) $x =$ _____



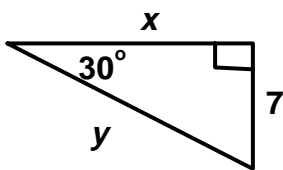
18) $x =$ _____



FIND A VALUE FOR x , y , and z . SIMPLIFY YOUR ANSWER. SHOW YOUR WORK !!!

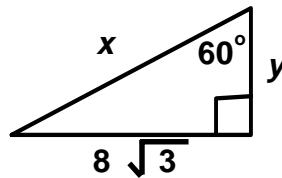
19) $x =$ _____

$y =$ _____



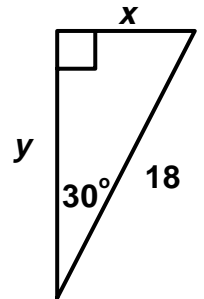
20) $x =$ _____

$y =$ _____



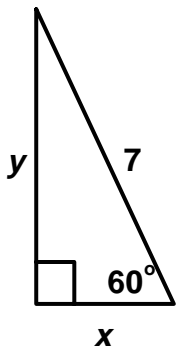
21) $x =$ _____

$y =$ _____



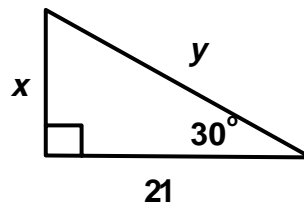
22) $x =$ _____

$y =$ _____



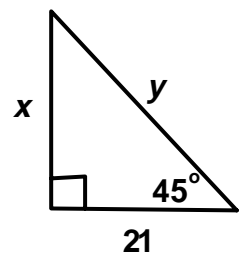
23) $x =$ _____

$y =$ _____



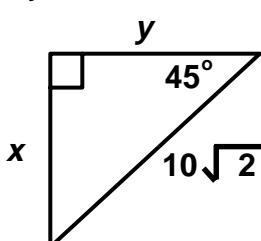
24) $x =$ _____

$y =$ _____



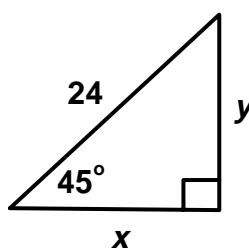
25) $x =$ _____

$y =$ _____



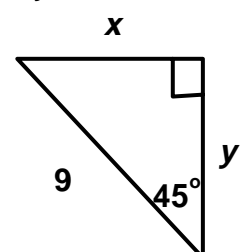
26) $x =$ _____

$y =$ _____



27) $x =$ _____

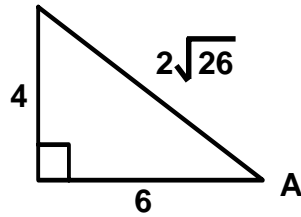
$y =$ _____



FIND EACH SINE, COSINE OR TANGENT. EXPRESS EACH VALUE IN SIMPLIFIED FORM. (NO DECIMALS!)

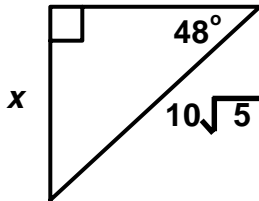
HONORS

- 28) $\sin A =$ _____
 $\cos A =$ _____
 $\tan A =$ _____

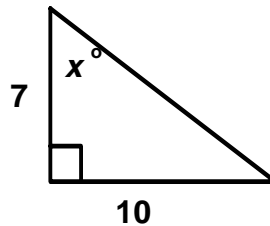


FIND A VALUE FOR x . ROUND ALL ANSWERS TO THE NEAREST TENTH. SHOW YOUR WORK!!

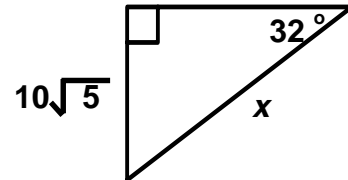
- 29) $x =$ _____



- 30) $x =$ _____



- 31) $x =$ _____



- 32) From a point on the North Rim of the Grand Canyon, a surveyor measures an angle of depression of 2° to a point on the South Rim. He knows the horizontal distance between the two points is 10 miles. How many feet is the South rim below the North Rim? (1 mi = 5280 ft)

- 33) A submarine at the surface of the ocean makes an emergency dive, its path making an angle of 21° with the surface.
- If it goes for 300 meters along its downward path, how deep will it be? What would be its horizontal distance from its starting point?
 - How many meters must it travel to reach a depth of 1000 meters?

- 34) The great Pyramid of Heops in Egypt has a square base 230 meters on each side. The faces of the pyramid make an angle of 51° with the horizontal.
- How tall is the pyramid?
 - What is the shortest distance you would have to climb up a face to reach the top?

